

ABSTRACT

The present invention relates to the field of digital engineering method and processor, and puts forward a new digital engineering method, which could increase the operation speed.

- 5 The mixed Q-nary carry line digital engineering method of the present invention includes: adding a numeral sign to each bit of numeral of the common Q-nary numerals that participate in the operation, the numerals that participate in the operation are k mixed Q-nary numerals, and addition operation of mixed Q-nary is performed on the k numerals at the same time, which starts from the lowest bit, and then the “sum by bit” is obtained. Said sum is taken into
10 the next operation layer as the “partial sum” numeral, meanwhile, the “mixed numeral scale” obtained is stored in the high bit adjacent to said bit in any carry line of the next operation layer. Performing such operation until no “mixed Q-nary” is produced, then the sum obtained by the last “adding by bit” is the result of the addition operation. The present invention provides mixed Q-nary, carry line processor.